

FIG. 1

2/18

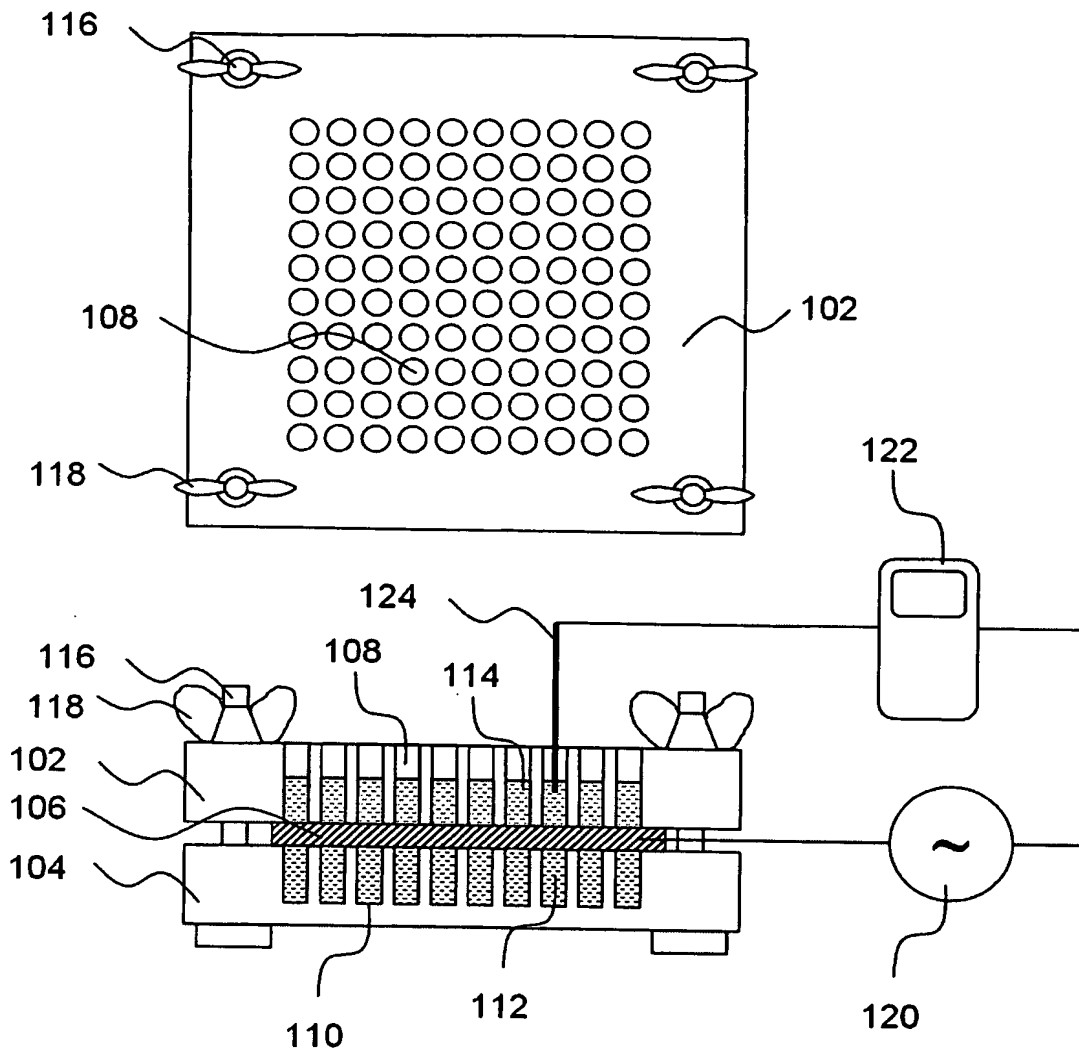


FIG. 2

Abbreviation	Name
Azone	1-Dodecyl Pyrrolidone
BDAC	Benzyl Dimethyl Dodecyl Ammonium Chloride
CBC	Cocamidopropyl Betaine
CBCAS	Cocamidopropyl Hydroxysultaine
CBOL	Oleyl Betaine
Cineole	Cineole
CTAB	Cetyl Trimethyl Ammonium Bromide
DA	Dodecyl Amine
DPC	Dodecyl Pyridinium Chloride
HPS	Hexadecyl Trimethyl Ammonio propane Sulfonate
IM	Isopropyl Myristate
LA	Lauric Acid
Limonene	Limonene
Linoleic	Linoleic Acid
Linolenic	Linolenic Acid
Menthol	Menthol (terpene)
ML	Methyl Laurate
MP	1-Methyl-2-Pyrrolidone
NLS	N Lauryl Sarcosine (CAS number 137-16-6 often called Sodium Lauroyl Sarcosinate)
NS	Nicotine Sulfate
Oleic	Oleic Acid
OTAB	Octyl Trimethyl Ammonium Bromide
PEGE	PolyEthyleneGlycol Dodecyl Ether
PP	1-Phenyl Piperazine
S20	Span 20/Sorbitan Monolaurate
SLA	Sodium Lauryl Ether Sulfate
SLS	Sodium Dodecyl Sulfate
SO	Sodium Oleate
SOS	Sodium Octyl Sulfate
Tetra	Tetracaine
TR	Triton
Tween 20	

FIG. 3

4/18

	Cationic Surfactant	Anionic Surfactant	Zwitterionic Surfactant	Nonionic Surfactant	Fatty Acid	Fatty Ester	Azone-Like Chemical	Other
Block 1	CTAB	SLS	HPS	Tween 20	Oleic	Tetra	Azone	Menthol
Block 2	DPC	NLS	CBOL	S20	Linoleic	IM	DA	MP
Block 3	BDAC	SOS	CBCAS	PEGE	LA	SO	NS	Cineole
Block 4	OTAB	SLA	CBC	TR	Linolenic	ML	PP	Limonene

FIG. 4

5/18

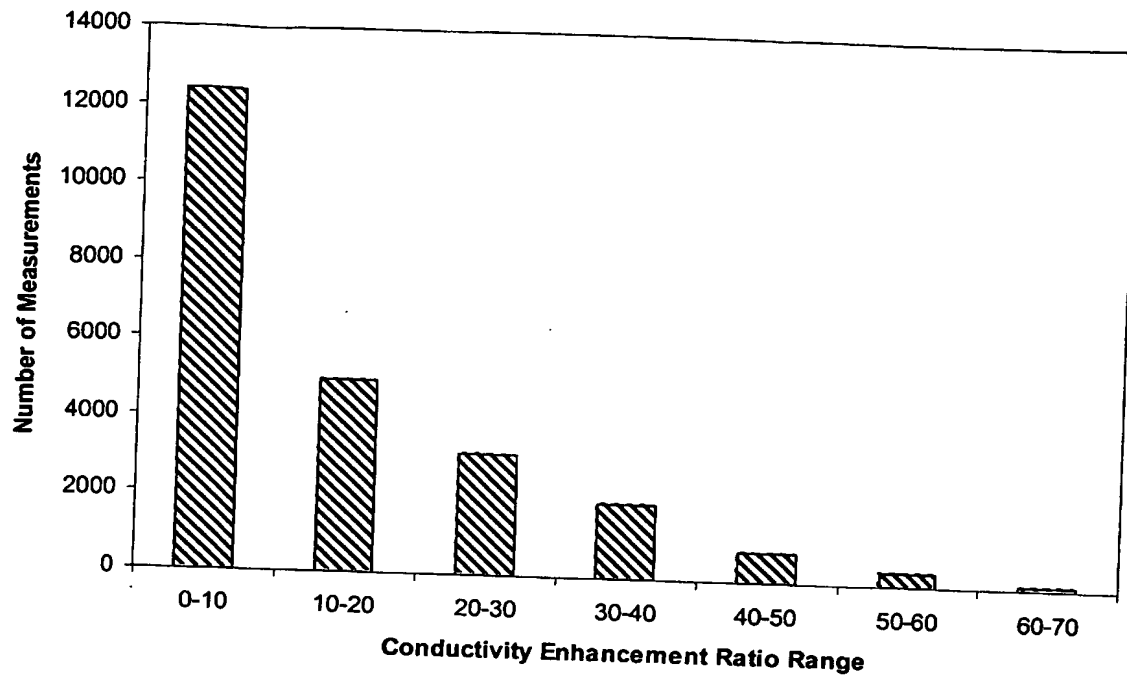


FIG. 5

6/18

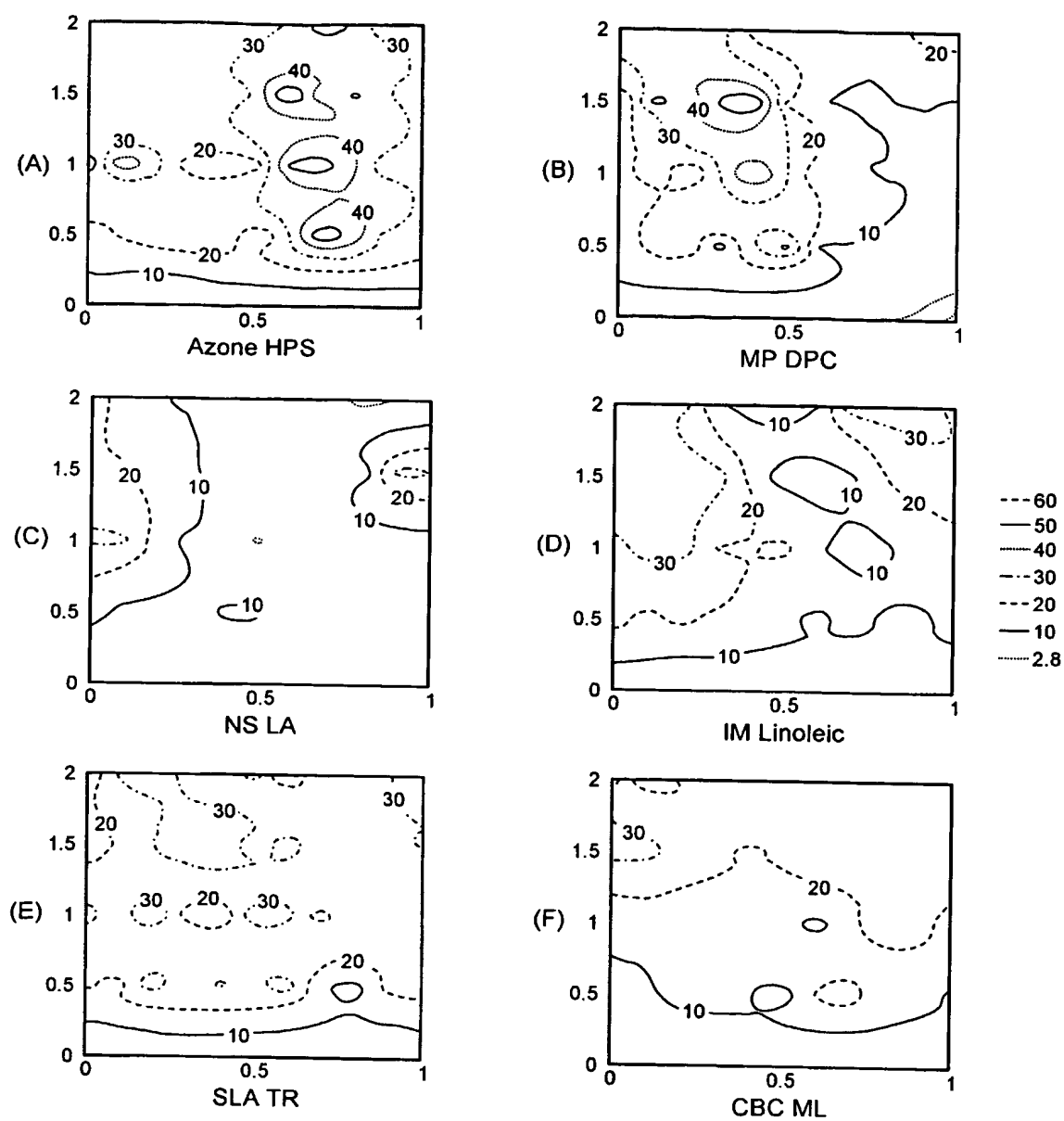


FIG. 6

7/18

	Max Enhancement				Max Synergy			
	wt Fr	Tot Conc	ER	S	wt Fr	Tot Conc	ER	S
Limonene PP	0.5	0.5	41.3	4.1	0.5	0.5	41.3	4.1
CBOL S20	0.3	1.5	35.0	3.0	0.3	1.5	35.0	3.0
SLA PP	0.7	0.5	65.4	3.4	0.7	0.5	65.4	3.4
NLS S20	0.6	1.0	50.0	2.2	0.5	0.5	41.0	4.0
NLS MP	0.5	0.5	54.0	4.0	0.5	0.5	54.0	4.0
TR Limonene	0.6	1.5	46.7	1.7	0.8	0.5	34.9	1.9
SOS LA	0.6	1.5	53.1	2.3	0.6	1.5	53.1	2.3
SLA TR	0.2	2.0	45.1	3.1	0.2	2.0	45.1	3.1
Cineole LA	0.5	1.5	48.6	1.3	0.1	1.0	42.2	1.6
Menthol Oleic	0.4	1.5	37.8	7.3	0.4	1.5	37.8	7.3
Tetra HPS	0.1	2.0	44.5	1.4	0.3	1.5	43.8	1.9

FIG. 7

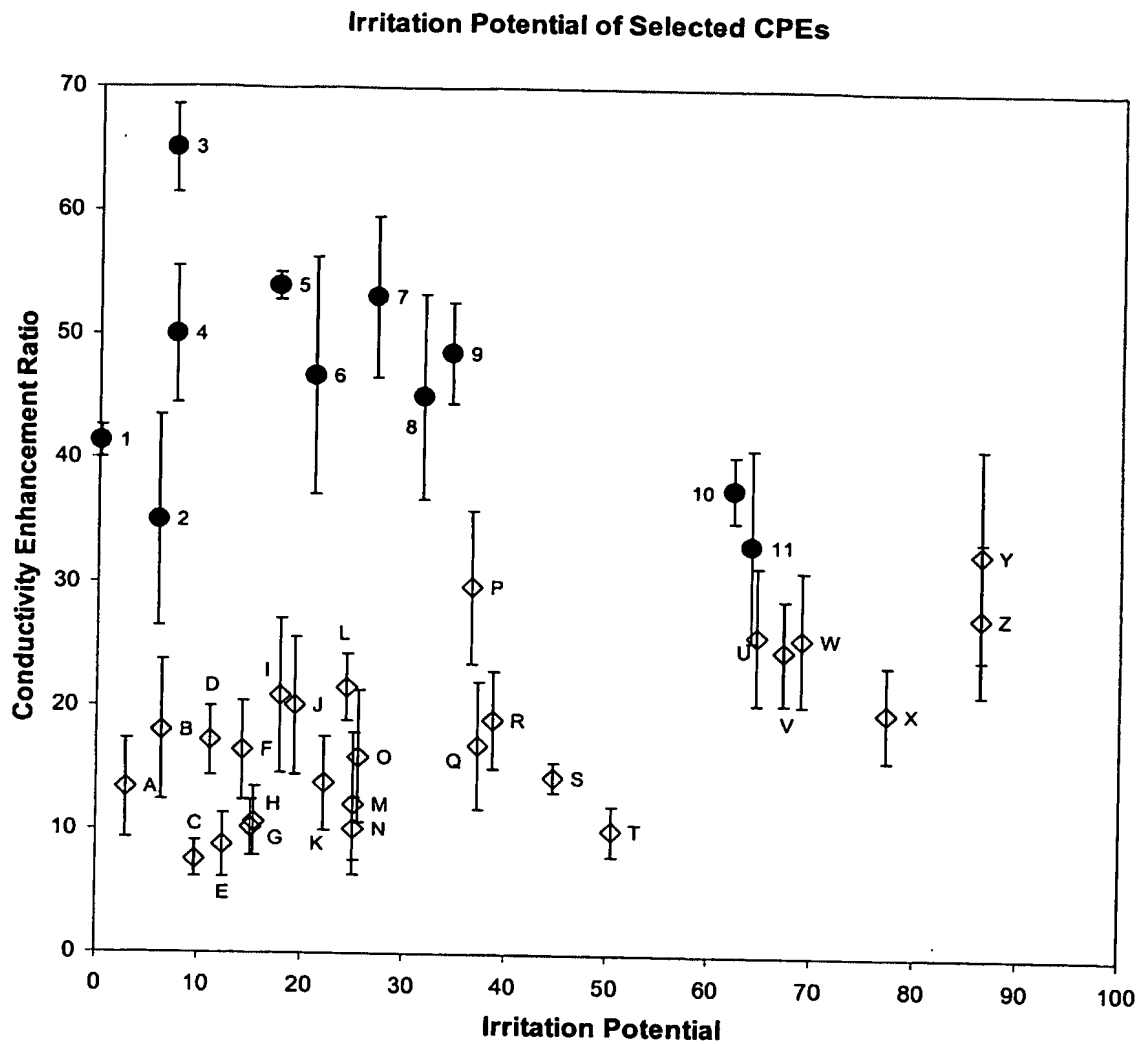


FIG. 8

9/18

Symbol	CPE Combination
1	Limonene PP
2	CBOL S20
3	SLA PP
4	NLS S20
5	NLS MP
6	TR Limonene
7	SOS LA
8	SLA TR
9	Cineole LA
10	Menthol Oleic
11	Tetra HPS

FIG. 9

Symbol	CPE
A	PP (0.5%)
B	NLS (0.5%)
C	CTAB (0.5%)
D	SLA (0.5%)
E	S20 (0.5%)
F	CBOL (1.5%)
G	PEGE (0.5%)
H	S20 (1.5%)
I	Linoleic (1.5%)
J	IM (1.5%)
K	Linolenic (0.5%)
L	CBCAS (2%)
M	TR (1.5%)
N	S20 (1.0%)
O	ML (1.5%)
P	NLS (1.0%)
Q	HPS (2.0%)
R	TR (2.0%)
S	BDAC (0.5%)
T	DA (0.5%)
U	LA (1.5%)
V	Tetra (2.0%)
W	Azone (2.0%)
X	DPC (1.5%)
Y	BDAC (2.0%)
Z	Linoleic (1.0%)

FIG. 10

10/18

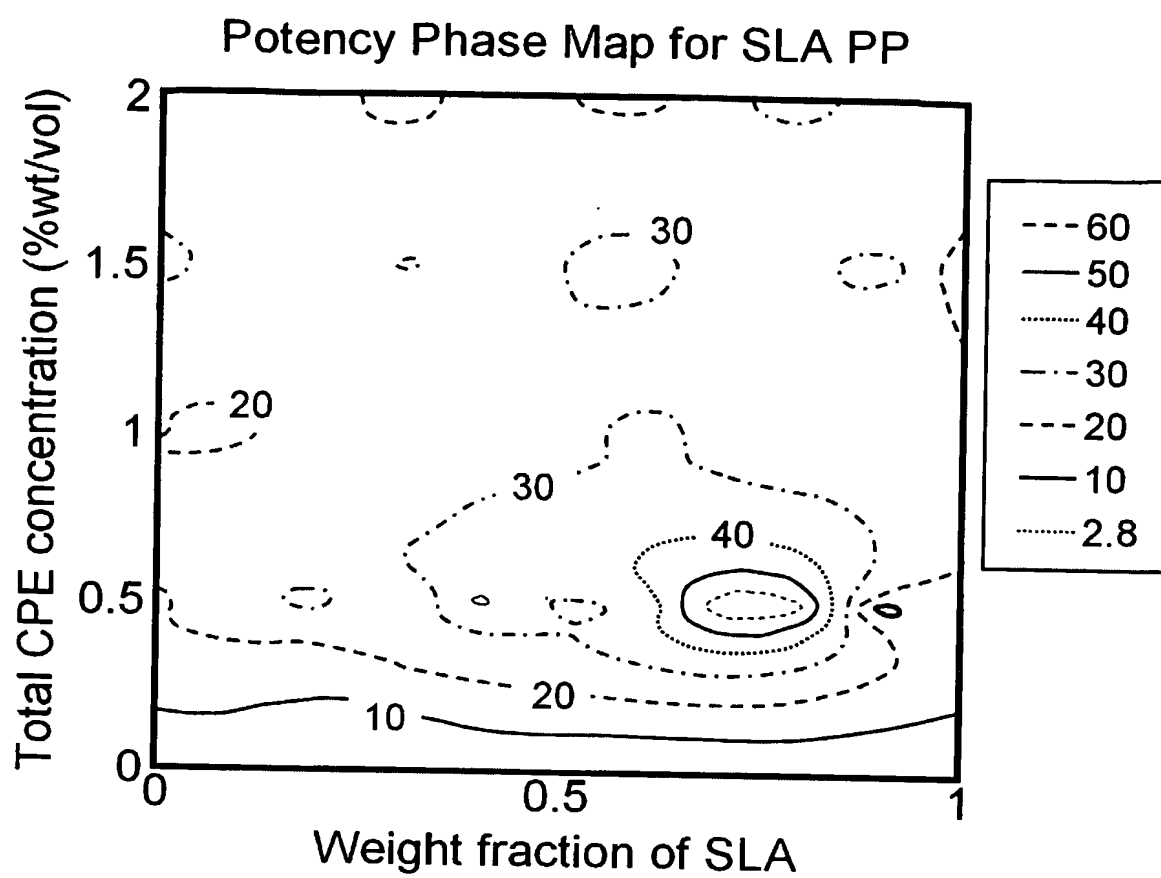


FIG. 11

11/18

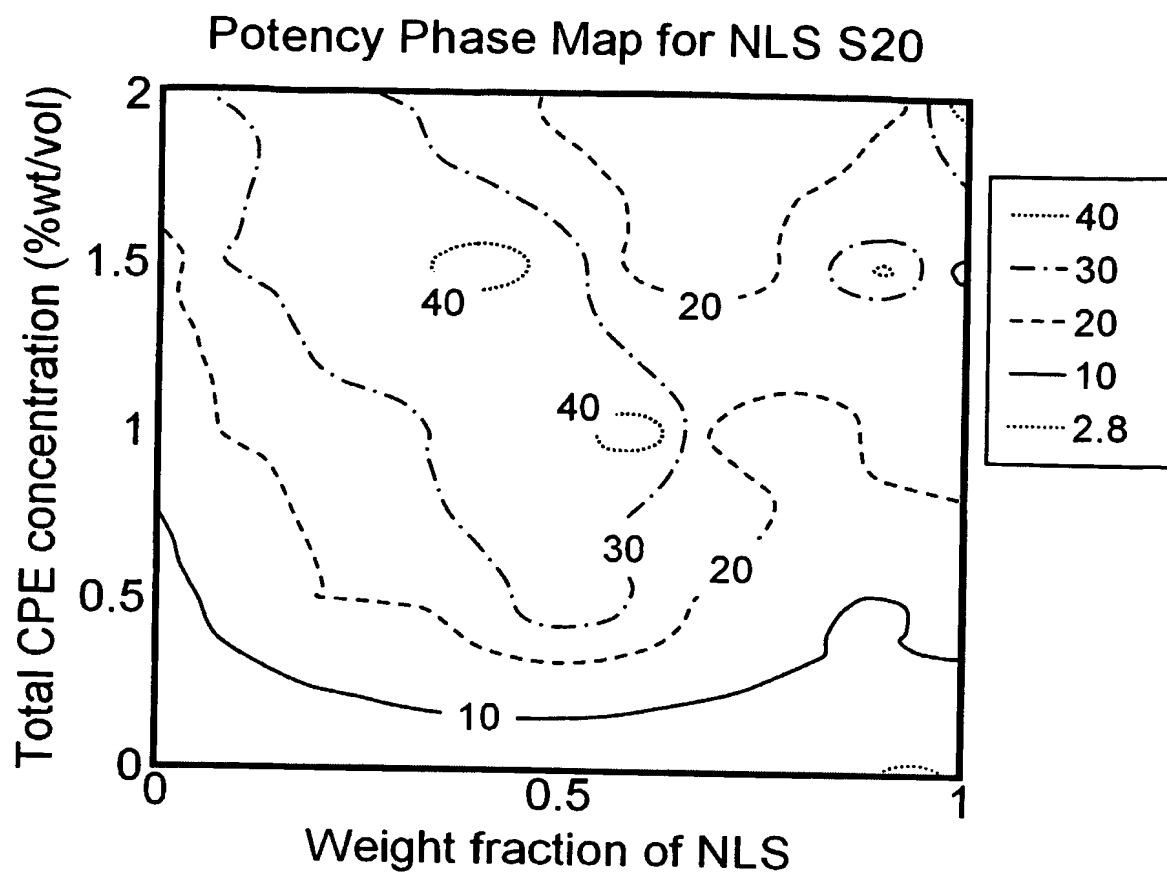


FIG. 12

12/18

Permeability Enhancement of Inulin

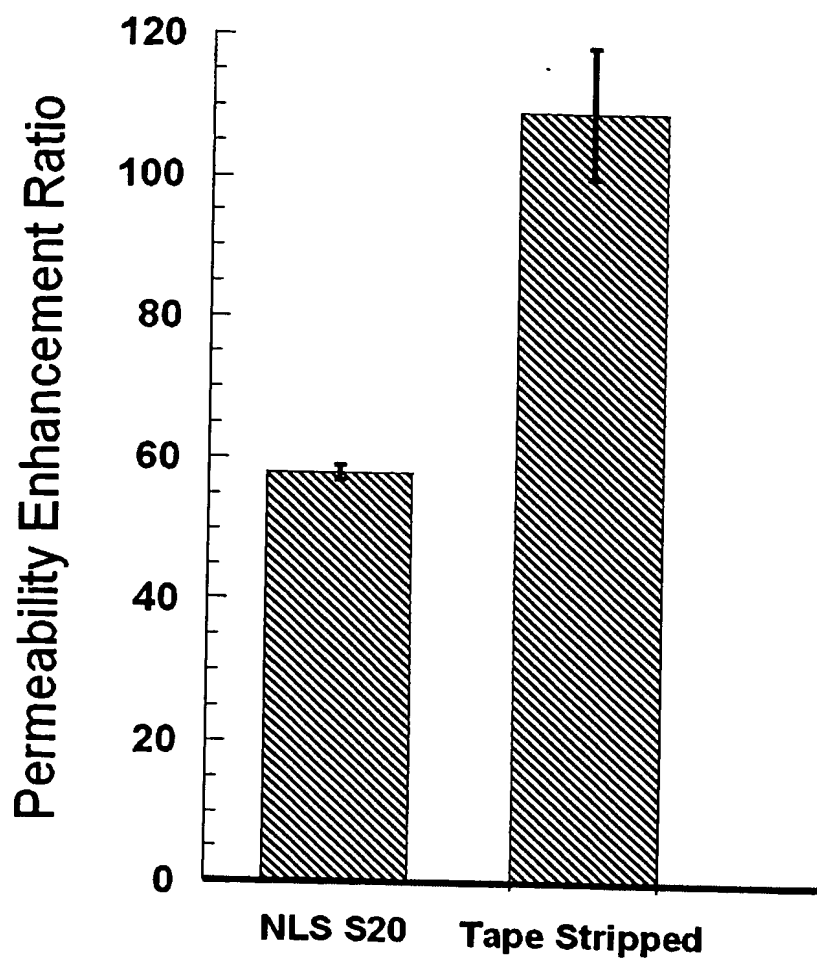


FIG. 13

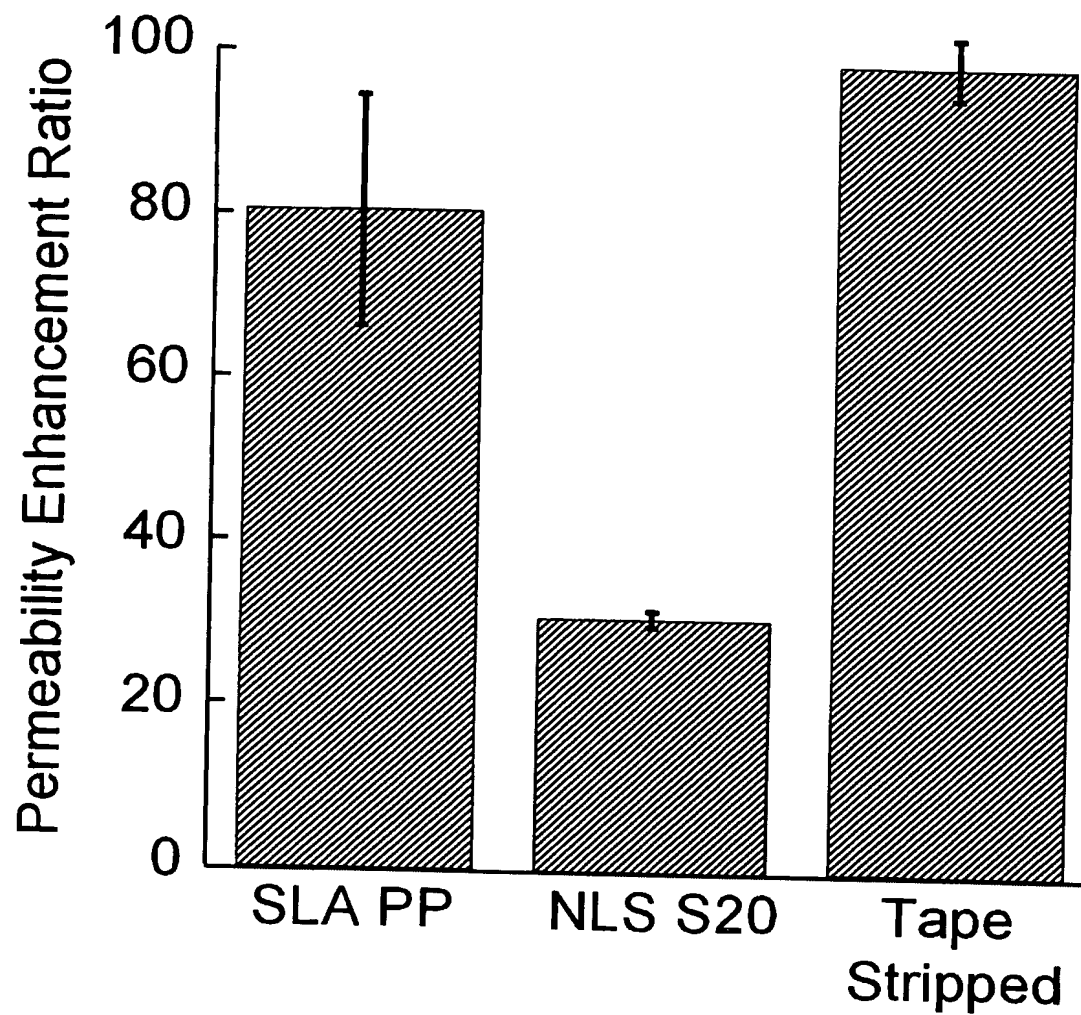


FIG. 14

14/18

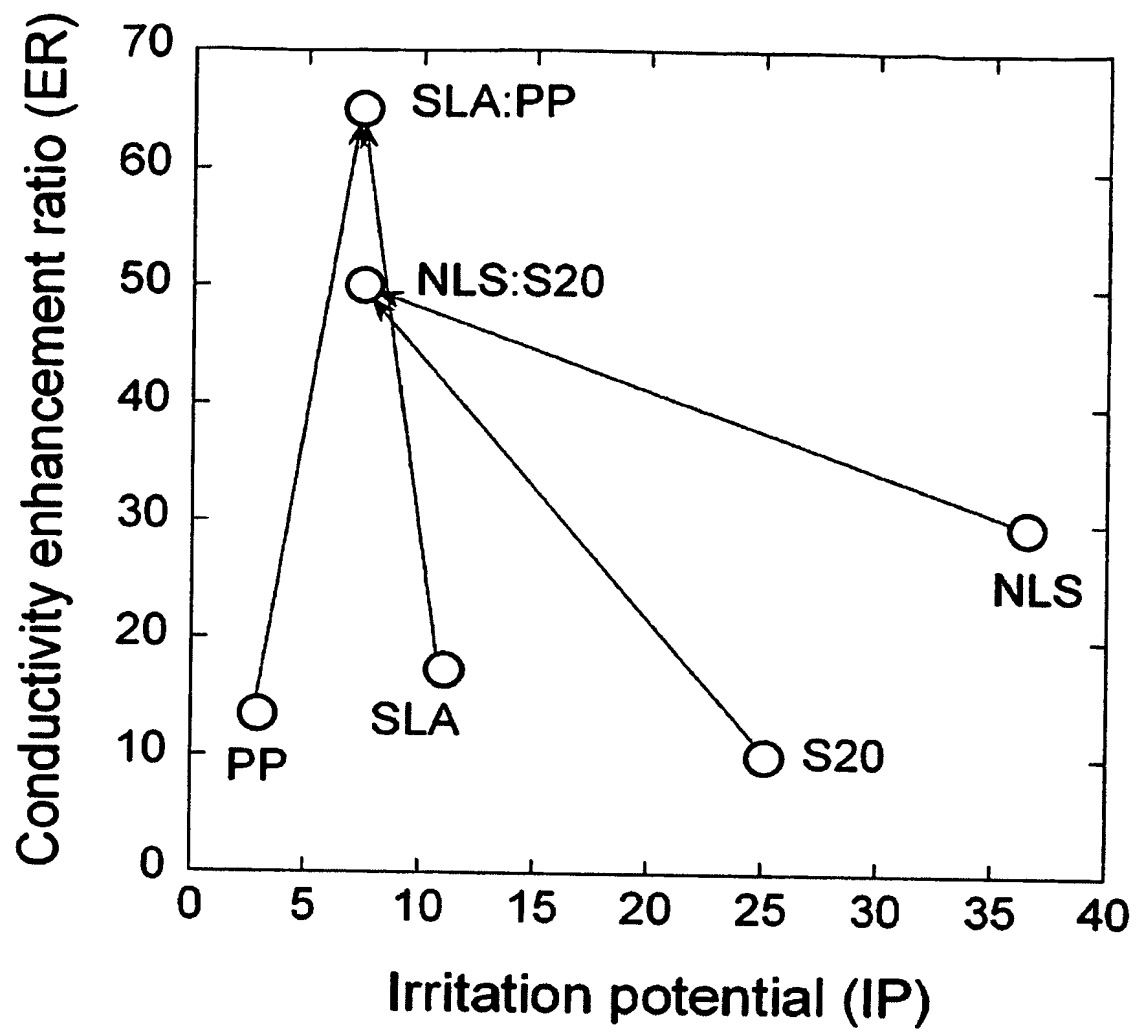


FIG. 15

15/18

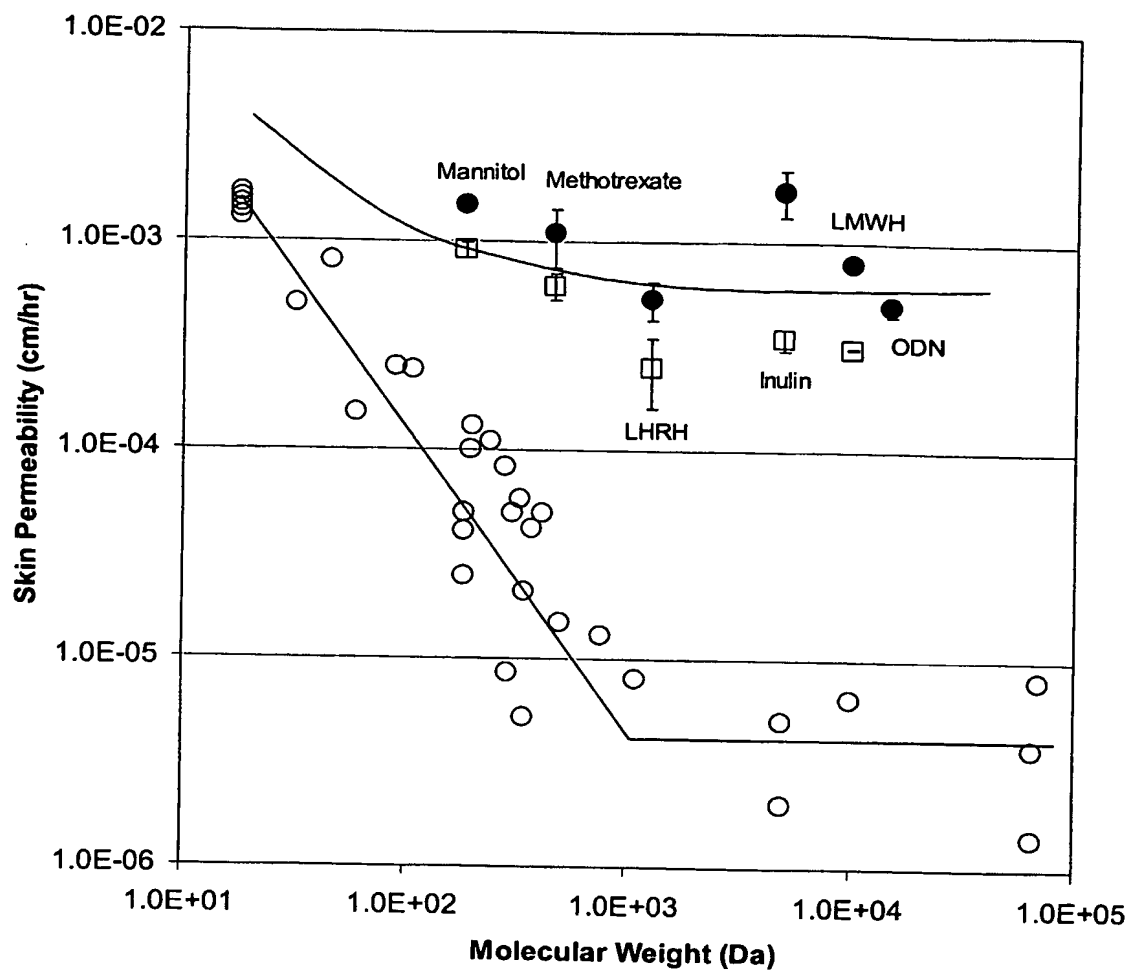


FIG. 16

16/18

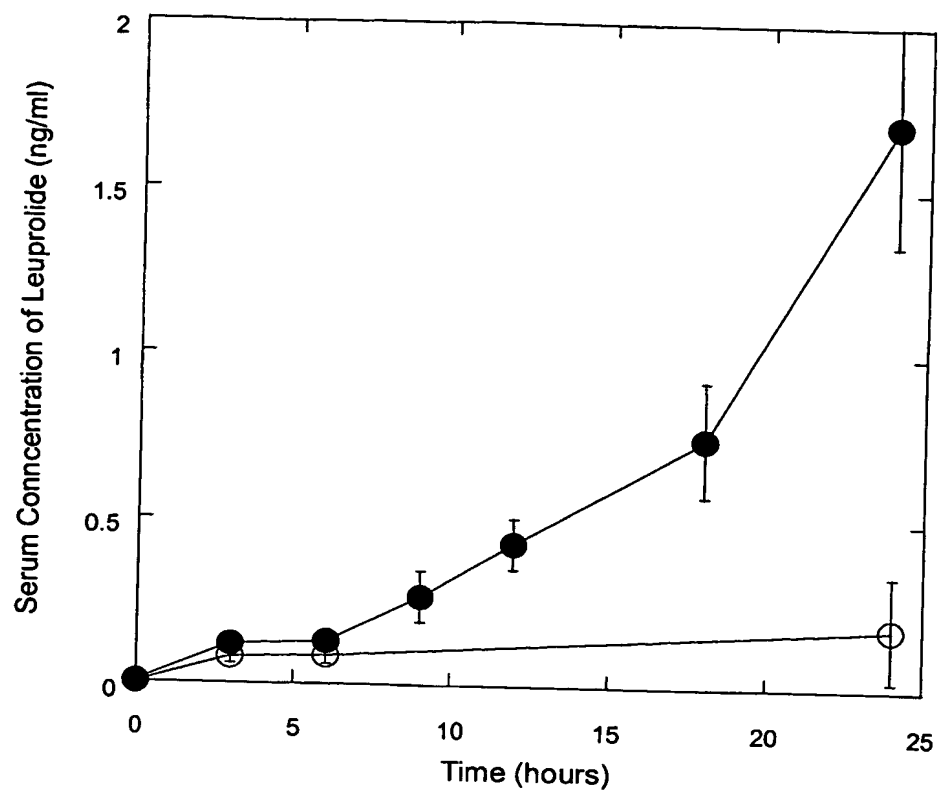


FIG. 17

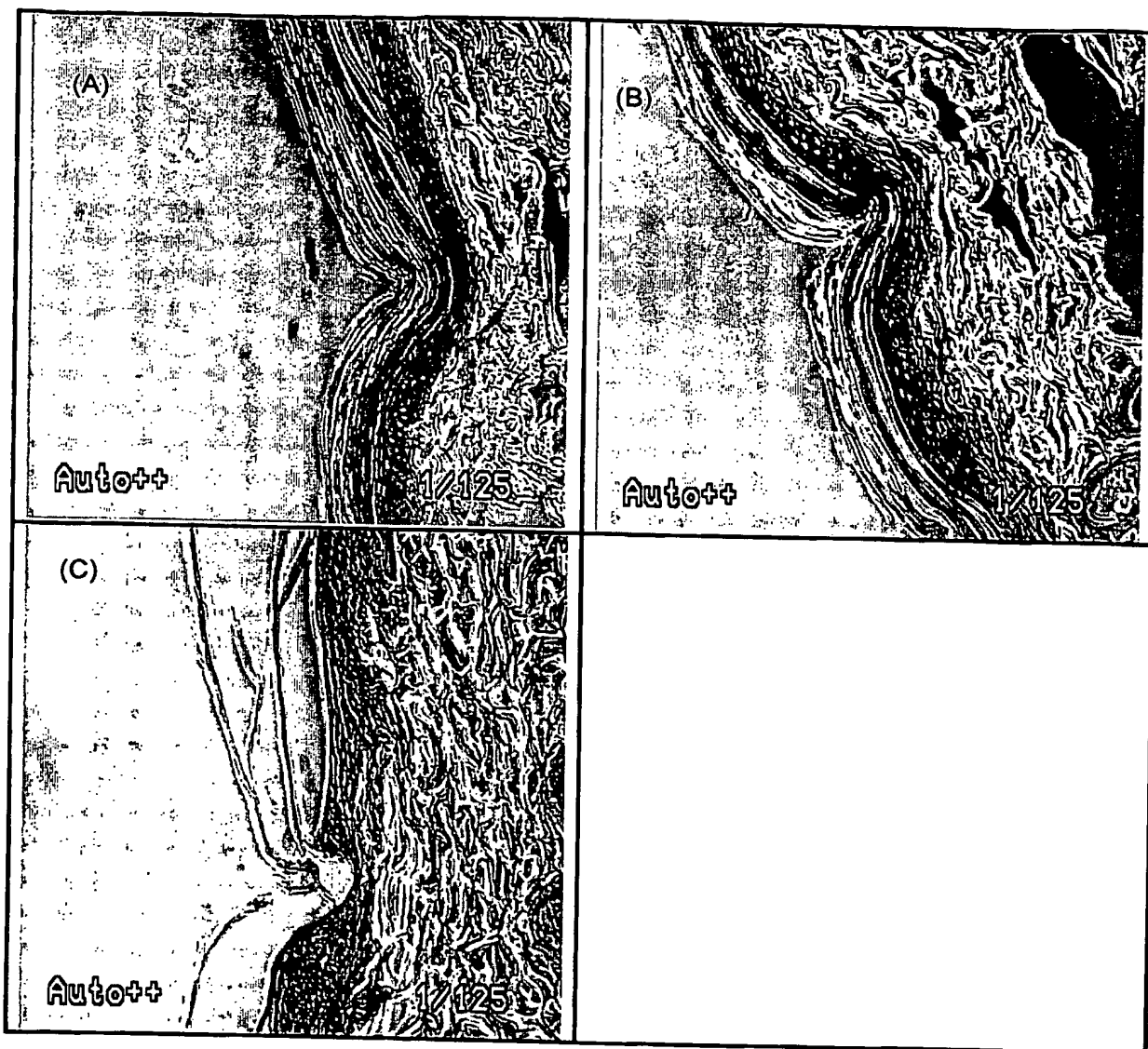


FIG. 18

18/18

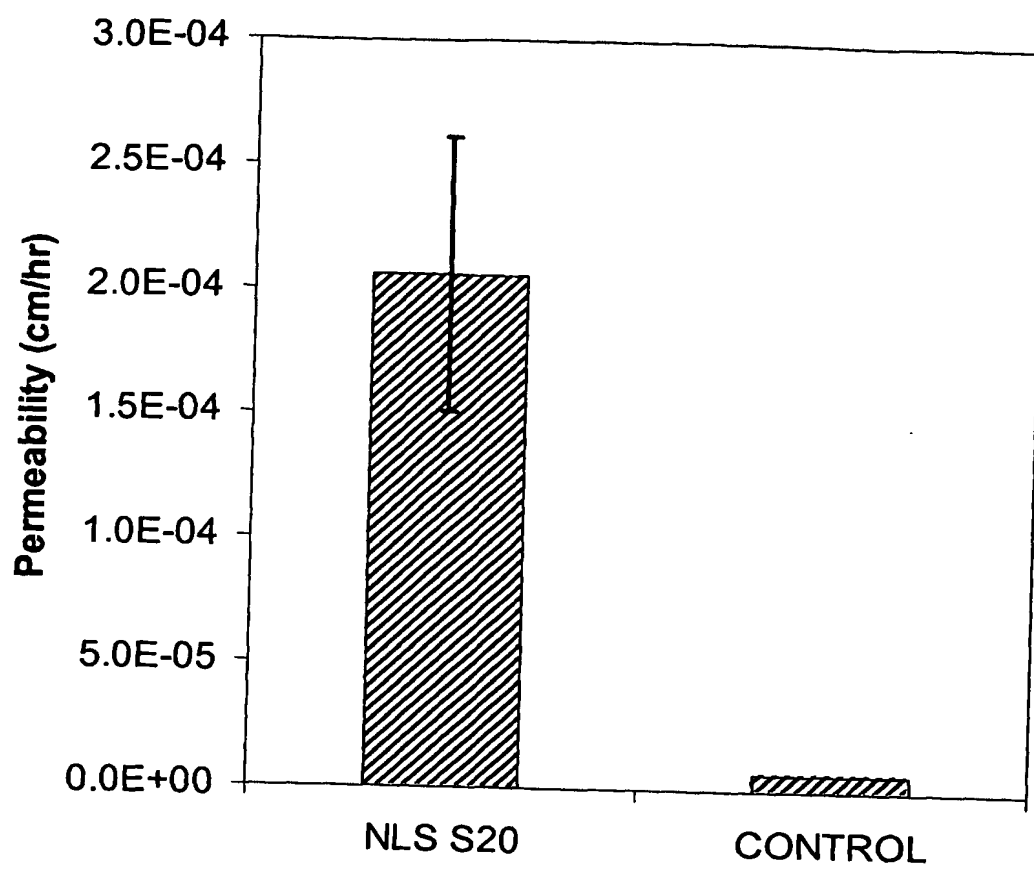


FIG. 19